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(54) **METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR REFORMATTING AN ELECTRONIC PRESCRIPTION TRANSACTION**

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(57) **ABSTRACT**

Related U.S. Application Data

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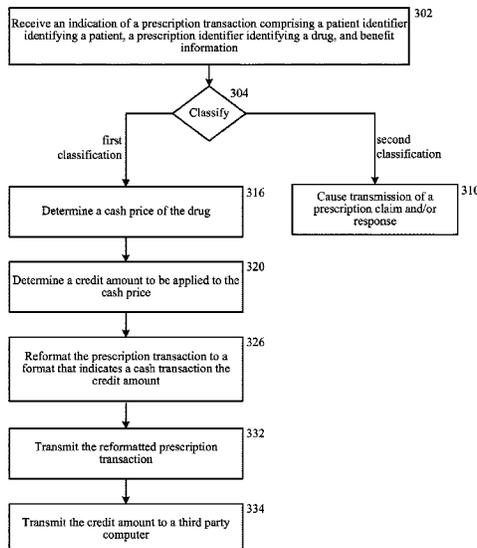
A method, apparatus and computer program product are provided for partitioning prescription transaction costs in an electronic prescription transaction by determining a credit amount to be applied to prescription transaction, based on an alternative cash price. In circumstances which an associated prescription claim is rejected or determined to be likely rejected, such as due to a requirement for prior authorization, a patient may still be motivated to purchase a prescription via a cash transaction, particularly with the credit amount applied. The prescription transaction may be reformatted to indicate a cash transaction and include the credit amount, and may exclude benefit information. The credit amount and a reformatted prescription transaction may be transmitted to the pharmacy computer or other third party computer.

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(58) **Field of Classification Search**
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8 Claims, 2 Drawing Sheets



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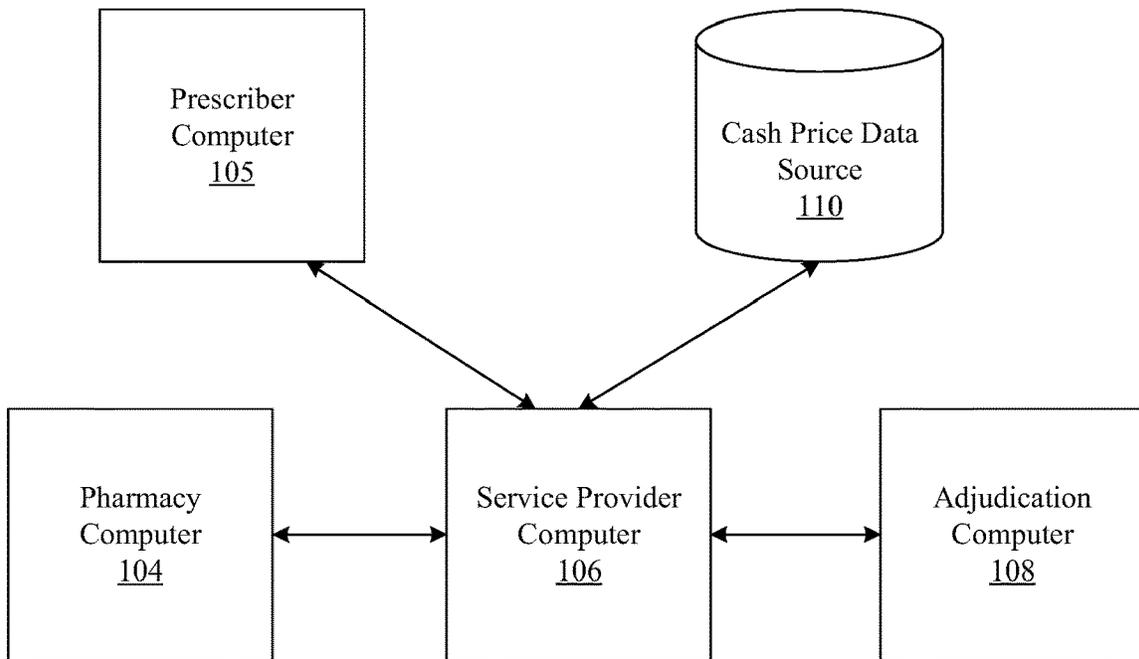


FIG. 1

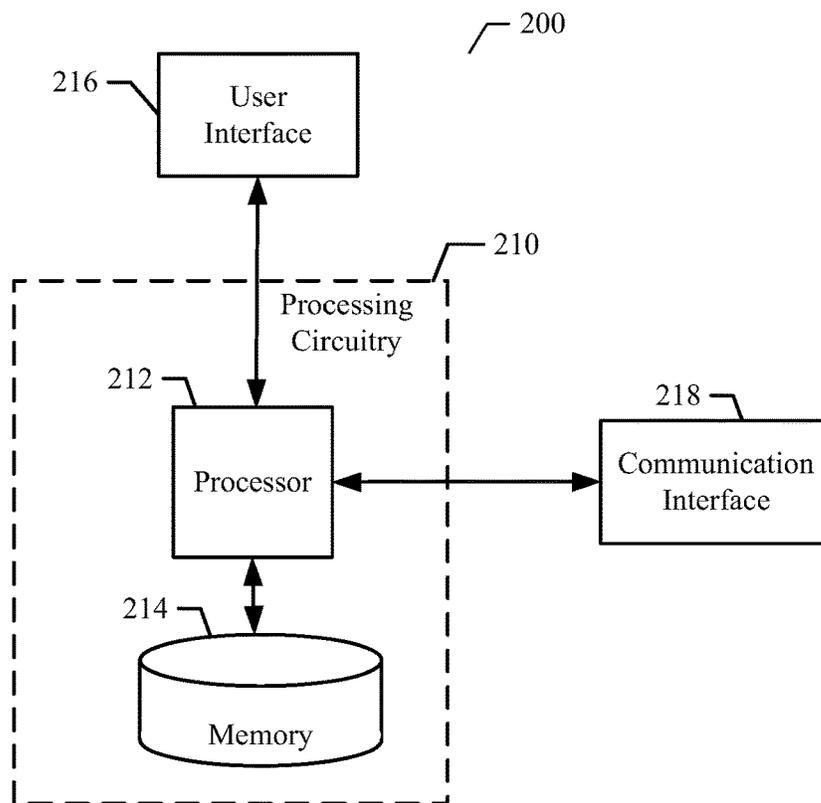


FIG. 2

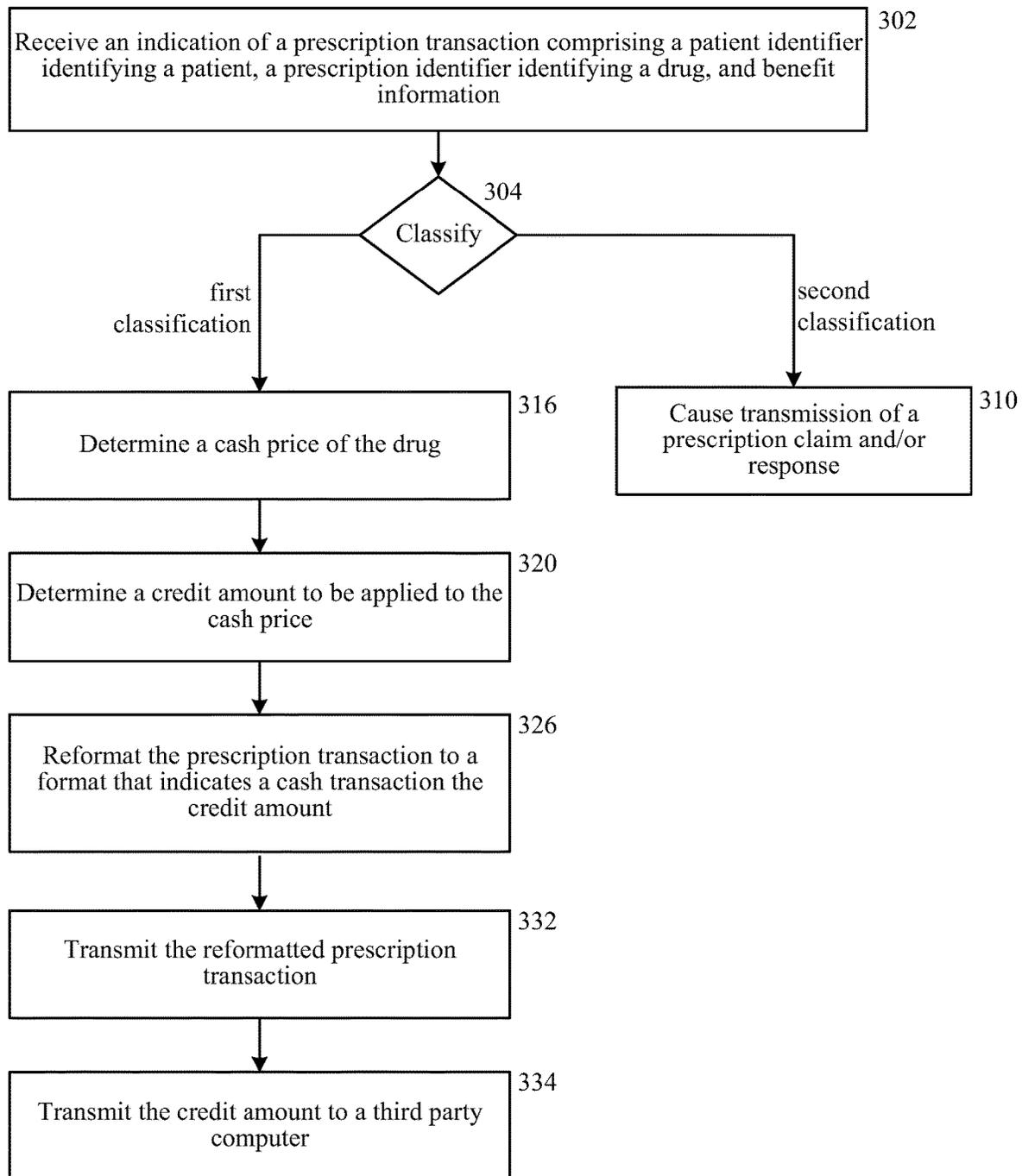


FIG. 3

**METHOD, APPARATUS, AND COMPUTER
PROGRAM PRODUCT FOR
REFORMATTING AN ELECTRONIC
PRESCRIPTION TRANSACTION**

**CROSS REFERENCE TO RELATED
APPLICATION**

This application is a continuation-in-part of, and claims priority to U.S. patent application Ser. No. 16/792,413 filed Feb. 17, 2020, and entitled METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR PARTITIONING PRESCRIPTION TRANSACTION COSTS IN AN ELECTRONIC PRESCRIPTION TRANSACTION, the entire contents of which is hereby incorporated by reference.

TECHNOLOGICAL FIELD

Embodiments of the present invention relate generally to prescription transactions and, more particularly, to methods, apparatuses, and computer program products for partitioning prescription transaction costs in an electronic prescription transaction, by determining a credit amount to be applied to the electronic prescription transaction based on an alternative cash price.

BACKGROUND

Prior authorization for prescription claims requires that a payer, such as an insurance plan and/or the like, approve the prescription prior to the patient obtaining the prescription and/or prior to agreement the prescription will be covered under the plan. Often times, an initial request, or even subsequent requests, for prior authorization for a prescription are denied and require further input or information be provided by the healthcare provider. In some instances, the payer does so to ensure the prescription is medically necessary, and/or to determine whether an alternative therapy may be used. As the price of prescription drugs continue to increase, and the number of prescription options and alternatives increase, prior authorization requirements are becoming more common, as the payer seeks cost-effective therapy for patients.

However, in many circumstances, the prior authorization process slows down or prevents the patient from obtaining their prescribed medication. Lag time between communications, review, and input by the healthcare provider, pharmacy, and/or payer may further delay or prevent the patient from obtaining the prescription. For example, obtaining prior authorization from a prescription benefit plan may require 12 hours or up to as many as 5 business days or more. In some cases, patients may become frustrated to the extent of abandoning any prescription therapy altogether.

Some pharmaceutical manufacturers offer rebates, copay assistance, or credits toward the purchase of certain prescription drugs, to encourage patients to adhere to their prescription, compete in the market with alternative medications, and/or the like. In some instances, a service provider computer may be authorized by a pharmaceutical manufacturer to distribute rebates, or credits, toward the cost of prescription drugs, as the service provider determines such that some transactions and/or patient may receive different rebate amounts, even for the same prescription drug. The service provider computer may automatically determine credit amounts in real-time or near real-time as prescription transactions and inquiries and submitted via a pharmacy.

BRIEF SUMMARY

Methods, apparatuses, and computer program products are therefore provided for partitioning costs of prescription transactions by determining a credit amount to be applied to a prescription transaction, based on an alternative cash price, and according to example embodiments provided herein. An apparatus is provided, comprising at least one processor and at least one memory including computer program code, the at least one memory and the computer program code configured to, with the processor, cause the apparatus to at least receive an indication of a prescription transaction comprising a patient identifier identifying a patient, a prescription identifier identifying a drug, and benefit information. The at least one memory and the computer program code are further configured to, with the processor, cause the apparatus to determine the prescription transaction is classified a first classification of at least two classifications of prescription transactions. In response to determining the prescription transaction is classified as the first classification, the at least one memory and the computer program code are further configured to, with the processor, cause the apparatus to determine a cash price of the drug. Further in response to determining the prescription transaction is classified as the first classification, the at least one memory and the computer program code are further configured to, with the processor, cause the apparatus to determine a credit amount to be applied to the cash price. The at least one memory and the computer program code are further configured to, with the processor, cause the apparatus to reformat the prescription transaction to a format that indicates a cash transaction and the credit amount. The at least one memory and the computer program code are further configured to, with the processor, cause the apparatus to cause transmission of the reformatted prescription transaction including the indication of the cash transaction and the credit amount.

The first classification comprises an indication that a prescription benefit claim associated with the prescription transaction is at least one of denied or likely to be denied. The prescription transaction is denied or determined to likely be denied based on a requirement for prior authorization. The cash price of the drug may be determined based on contractual pricing associated with a manufacturer. The prescription transaction is received from at least one of a pharmacy computer, an adjudication computer, or a prescriber computer. The reformatted prescription transaction is transmitted to at least one of a pharmacy computer, an adjudication computer, or a prescriber computer. The cash price of the drug may be determined based on accessing data provided by a provider of a cash discount system. The at least one memory and the computer program code may be further configured to, with the processor, cause the apparatus to at least transmit the credit amount to a third party computer.

A method is provided, including receiving an indication of a prescription transaction comprising a patient identifier identifying a patient, a prescription identifier identifying a drug, and benefit information. The method may further include determining the prescription transaction is classified a first classification of at least two classifications of prescription transactions. In response to determining the prescription transaction is classified as the first classification, the method includes determining a cash price of the drug, and determining a credit amount to be applied to the cash price. The method further include reformatting the prescription transaction to a format that indicates a cash transaction and the credit amount, and causing transmission of the

reformatted prescription transaction including the indication of the cash transaction and the credit amount.

A computer program product is provided, comprising at least one non-transitory computer-readable storage medium having computer-executable program code instructions stored therein, the computer-executable program code instructions comprising program code instructions to receive an indication of a prescription transaction comprising a patient identifier identifying a patient, a prescription identifier identifying a drug, and benefit information. The computer-executable program code instructions further include program code instructions to determine the prescription transaction is classified a first classification of at least two classifications of prescription transactions. In response to determining the prescription transaction is classified as the first classification, the computer-executable program code instructions further include program code instructions to determine a cash price of the drug, and to determine a credit amount to be applied to the cash price. The computer-executable program code instructions further include program code instructions to reformat the prescription transaction to a format that indicates a cash transaction and the credit amount. The computer-executable program code instructions further include program code instructions to cause transmission of the reformatted prescription transaction including the indication of the cash transaction and the credit amount.

An apparatus is provided, including means for receiving an indication of a prescription transaction comprising a patient identifier identifying a patient, a prescription identifier identifying a drug, and benefit information. The apparatus may further include means for determining the prescription transaction is classified a first classification of at least two classifications of prescription transactions. In response to determining the prescription transaction is classified as the first classification, the apparatus includes means for determining a cash price of the drug, and means for determining a credit amount to be applied to the cash price. The apparatus further includes means for reformatting the prescription transaction to a format that indicates a cash transaction and the credit amount, and means for causing transmission of the reformatted prescription transaction including the indication of the cash transaction and the credit amount.

The above summary is provided merely for purposes of summarizing some example embodiments of the invention so as to provide a basic understanding of some aspects of the invention. Accordingly, it will be appreciated that the above described example embodiments are merely examples and should not be construed to narrow the scope or spirit of the disclosure in any way. It will be appreciated that the scope of the disclosure encompasses many potential embodiments, some of which will be further described below, in addition to those here summarized.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

Having thus described embodiments of the invention in general terms, reference will now be made to the accompanying drawings, which are not necessarily drawn to scale, and wherein:

FIG. 1 is an example overview of a system that can be used to practice some example embodiments described herein;

FIG. 2 is an exemplary schematic diagram of an apparatus in accordance with some example embodiments; and

FIG. 3 is a flowchart of operations that may be performed in accordance with some example embodiments.

DETAILED DESCRIPTION

Some embodiments of the present invention will now be described more fully hereinafter with reference to the accompanying drawings, in which some, but not all embodiments of the invention are shown. Indeed, various embodiments of the invention may be embodied in many different forms and should not be construed as limited to the embodiments set forth herein; rather, these embodiments are provided so that this disclosure will satisfy applicable legal requirements. Like reference numerals refer to like elements throughout.

As used herein, where a computing device is described to receive data from another computing device, it will be appreciated that the data may be received directly from the other computing device and/or may be received indirectly via one or more intermediary computing devices, such as, for example, one or more servers, relays, routers, network access points, and/or the like. Similarly, where a computing device is described herein to transmit data to another computing device, it will be appreciated that the data may be sent directly to the other computing device or may be sent to the other computing device via one or more interlinking computing devices, such as, for example, one or more servers, relays, routers, network access points, and/or the like.

FIG. 1 is an overview of a system that can be used to partition prescription transaction costs by determining a credit amount to be applied to a prescription transaction, based on an alternative cash price, and according to certain example embodiments described herein. The pharmacy computer **104** may be associated with a pharmacy or pharmacy network to facilitate the filling of prescriptions, transmitting prescription claims to a service provider computer **106**, and/or the like. The pharmacy computer **104** may additionally or alternatively be associated with a physician's office, clinic, long-term care facility, hospital, etc. Accordingly, while the exemplary pharmacy computer **104** may be frequently referenced herein as part of a pharmacy or pharmacy network, the pharmacy computer **104** may be associated with any other healthcare provider, such as a physician's office, hospital and/or other medical facility.

The pharmacy computer **104** may be any processor-driven device that facilitates the submission of prescription transaction requests made by patients or consumers and the communication of information associated with prescription transactions to the service provider computer **106**. In certain example embodiments, the pharmacy computer **104** may be a point of sale device associated with a pharmacy. The execution of the computer-implemented instructions by the pharmacy computer **104** may form a special purpose computer or other particular machine that is operable to facilitate the submission of pharmacy transaction requests made by patients, pharmacists, and/or the like, and the communication of information associated therewith to a service provider computer **106**.

A prescriber computer **105** may be any processor-driven device that facilitates the submission of prescriptions, such as by a physician or other healthcare provider, to the service provider computer **106**. The service provider computer **106** may further route prescriptions to a pharmacy computer **104** to be filled, and/or adjudication computer **108**, to be adjudicated and/or processed for prior authorization. In certain embodiments, the prescriber **105** may be configured to receive a response from the service provider computer **106**,

and provide pricing information via a user interface during a patient encounter. In this regard, the pricing information may be provided in real-time or near real-time and may impact which medication is prescribed by a physician (such as based on affordability for a patient).

The service provider computer **106** may include, but is not limited to, a processor-driven device that is configured for receiving, processing, and fulfilling prescription requests from the pharmacy computer **104** and/or the adjudication computer **108** (described below), relating to prescription tracking, claims processing, benefits, billing, other healthcare transactions, and/or other related activities. Additionally or alternatively, the service provider computer **106** may be operable to facilitate the receipt, routing, and/or processing of healthcare transactions such as prescription transactions, prescription claims, and/or associated responses amongst various components and/or subsystems such as, but not limited to, those depicted in FIG. 1.

In certain exemplary embodiments, the service provider computer **106** may be configured as or may comprise a switch or router that evaluates, modifies, reformats, generates, and/or routes healthcare transactions such as prescription transactions. For example, the service provider computer **106** may route prescription transactions communicated from the pharmacy computer **104** to an adjudication computer **108**, such as that associated with a pharmacy benefits manager (PBM), an insurer, a Medicare or other government healthcare insurance program payer, or other payer. According to certain embodiments, the adjudication computer **108** may comprise any other computer system that receives and adjudicates a prescription claim on behalf of the payer.

Additionally or alternatively, the service provider computer **106** may reformat healthcare transactions into another form of transaction and modify the recipient information of the reformatted transaction before routing the reformatted transaction to another party, such as adjudication computer **108**. The service provider computer **106** may also optionally apply edits to at least some of the healthcare transactions.

The service provider computer **106** may transmit responses from the adjudication computer **108** regarding the prescription transaction to the pharmacy computer **104**. For example, the service provider computer **106** may notify the pharmacy computer **104** that preauthorization is required, and that the claim is therefore at least initially rejected. As another example, in an instance of an adjudicated claim, the service provider computer **106** may notify the pharmacy computer **104** of a co-pay or out of pocket costs to be paid by the patient for the prescription and/or the benefit applied to the prescription transaction. In this regard, a message or other notification may be appended to or included in the response transmitted to the pharmacy computer **104**, such as a reject code or reason indicating preauthorization is required, co-pay amounts, and/or the like. Any of the aforementioned responses may be provided to the pharmacy computer **104** together with a prescription transaction response, or the service provider computer **106** may reformat the prescription transaction to include the details of such responses and transmit the reformatted healthcare transaction to the pharmacy computer **104**.

The service provider computer **106** may further include a prior authorization engine, configured to initiate requests to payers and/or adjudication computers for prior authorization. Additionally or alternatively, the prior authorization engine may predict prior authorization requirements and/or rejections such as based on configured prior authorization requirements maintained by the service provider computer **106** such as under the direction of a prescription benefit plan.

The prior authorization may additionally or alternatively predict prior authorization requirements and/or rejections based on an analysis of historical claims and which claims have been previously rejected due to a need for prior authorization. The prior authorization engine is described in further detail herein.

The cash price data source **110** may comprise any computing device configured to provide cash pricing information to the service provider computer **106**. For example, contractual pricing information pertaining to cash prices of prescription drugs at particular pharmacies may be maintained in the cash price data source **110**, which may be maintained and/or accessed by the service provider computer **106**. Patients may obtain prescriptions for the cash prices in some examples without the patient necessarily providing a cash discount card associated with a cash discount system, described in further detail below. However, according to some embodiments a patient may optionally utilize a cash discount card and/or cash discount system to purchase a prescription.

According to certain embodiments, the cash price data source **110** may optionally provide cash discount pricing information to the service provider computer **106**. In some instances, a pharmacy works in agreement with a cash discount system to offer the cash price and/or discount on behalf of the cash discount system. Cash discount systems provide websites or mobile applications to track prescription drug prices and offer coupons or discounts on certain prescription medications. A patient may access the website or mobile application to check the cash price of a certain medication while taking into consideration any available discounts or coupons. The cash price is considered the amount paid without submitting a prescription claim to a payer such as a pharmacy benefits manager (PBM) or other health insurance plan. The patient may then compare the cash price to a price the patient would pay for the same prescription drug when submitting a prescription claim. In some instances, cash discount systems enable a patient to present a cash discount card and to obtain a medication at a lower cost than what would be obtainable by submitting a prescription claim to a PBM for the same medication. In this regard, according to certain embodiments, the cash price data source **110** may be a system or database of a cash discount system and/or a third party system configured to track pricing offered by the cash discount system.

According to certain embodiments, the cash price data source **110** may be maintained or operated by the pharmacy computer **104**, such as in instances in which the pharmacy tracks historical data or historical pricing of cash transactions occurring at the pharmacy. The "cash price," as may be referred to herein, may be out of pocket cash prices to be paid by a patient. In certain examples, the cash price may be referred to as a cash price alternative, to emphasize the cash price is an alternative to a co-pay or out of pocket cost quoted by a prescription benefit plan and/or other insurance plan. A cash transaction that reflects a cash price may be a transaction in which a patient purchases or is to purchase a prescription drug without the claim being submitted to a prescription benefit plan, and/or in instances in which an initial claim is submitted, the claim maybe reversed in favor of the cash transaction. In scenarios in which cash transactions are utilized, the prescription may no longer be subject to prior authorization requirements and/or other restrictions enforced by a prescription benefit plan. Additionally, in a cash transaction, the manufacturer does not owe any contractual back-end rebates to the PBM, and can potentially give that money directly to patients in the form of assistance.

Regardless, without methods of a manufacturer and/or service provider setting or impacting a patient price, either through the benefit response and/or creating a cash price, for example, a patient that cannot afford a prescription has no ability to pick up and pay for a prescribed medication/therapy. Example embodiments provided herein improve prescription adherence, and in some examples allow a patient to obtain a prescription more quickly than in other transactions (performed without the advantages of example embodiments) subject to prior authorization, by offering cheaper alternatives to a pharmacy's typical cash price, by way of the service provider computer's integration with a pharmaceutical manufacturer computer and defined contracts and agreements for the service provider computer to adjust pricing on behalf of a manufacturer. In this regard, the service provider computer 106 may store and access information related to contractual pricing associated with a manufacturer.

Referring now to FIG. 2, apparatus 200 is a computing device(s) configured for implementing pharmacy computer 104, service provider computer 106, adjudication computer 108, and/or cash price data source 110, according to example embodiments.

Apparatus 200 may at least partially or wholly embody or be embodied by any of the pharmacy computer 104, service provider computer 106, and/or adjudication computer 108. Apparatus 200 may therefore implement any of the pharmacy computer 104, service provider computer 106, and/or adjudication computer 108, in accordance with some example embodiments, or may be implemented as a distributed system that includes any of the pharmacy computer 104, service provider computer 106, adjudication computer 108, and/or associated network(s).

It should be noted that the components, devices, and elements illustrated in and described with respect to FIG. 2 may not be mandatory and thus some may be omitted in certain embodiments. For example, FIG. 2 illustrates a user interface 216, as described in more detail below, which may be optional in any of the pharmacy computer 104 (such as when the pharmacy computer 104 is implemented as a service communicatively connected to a work station or other user device utilized by a pharmacist or other pharmacy employee), service provider computer 106, and/or adjudication computer 108. Additionally, some embodiments may include further or different components, devices, or elements beyond those illustrated in and described with respect to FIG. 2.

Continuing with FIG. 2, processing circuitry 210 may be configured to perform actions in accordance with one or more example embodiments disclosed herein. In this regard, the processing circuitry 210 may be configured to perform and/or control performance of one or more functionalities of apparatus 200 in accordance with various example embodiments. The processing circuitry 210 may be configured to perform data processing, application execution, and/or other processing and management services according to one or more example embodiments. In some embodiments apparatus 200, or a portion(s) or component(s) thereof, such as the processing circuitry 210, may be embodied as or comprise a circuit chip. The circuit chip may constitute means for performing one or more operations for providing the functionalities described herein.

In some example embodiments, the processing circuitry 210 may include a processor 212, and in some embodiments, such as that illustrated in FIG. 2, may further include memory 214. The processing circuitry 210 may be in communication with or otherwise control a user interface

216, and/or a communication interface 218. As such, the processing circuitry 210, such as that included in any of the pharmacy computer 104, service provider computer 106, adjudication computer 108, cash price data source 110, and/or apparatus 200 may be embodied as a circuit chip (e.g., an integrated circuit chip) configured (e.g., with hardware, software, or a combination of hardware and software) to perform operations described herein.

The processor 212 may be embodied in a number of different ways. For example, the processor 212 may be embodied as various processing means such as one or more of a microprocessor or other processing element, a coprocessor, a controller, or various other computing or processing devices including integrated circuits such as, for example, an ASIC (application specific integrated circuit), an FPGA (field programmable gate array), or the like. Although illustrated as a single processor, it will be appreciated that the processor 212 may comprise a plurality of processors. The plurality of processors may be in operative communication with each other and may be collectively configured to perform one or more functionalities of apparatus 200 as described herein. The plurality of processors may be embodied on a single computing device or distributed across a plurality of computing devices collectively configured to function as pharmacy computer 104, service provider computer 106, adjudication computer 108, and/or apparatus 200. In some example embodiments, the processor 212 may be configured to execute instructions stored in the memory 214 or otherwise accessible to the processor 212. As such, whether configured by hardware or by a combination of hardware and software, the processor 212 may represent an entity (e.g., physically embodied in circuitry—in the form of processing circuitry 210) capable of performing operations according to embodiments of the present invention while configured accordingly. Thus, for example, when the processor 212 is embodied as an ASIC, FPGA, or the like, the processor 212 may be specifically configured hardware for conducting the operations described herein. Alternatively, as another example, when the processor 212 is embodied as an executor of software instructions, the instructions may specifically configure the processor 212 to perform one or more operations described herein.

In some example embodiments, the memory 214 may include one or more non-transitory memory devices such as, for example, volatile and/or non-volatile memory that may be either fixed or removable. In this regard, the memory 214 may comprise a non-transitory computer-readable storage medium. It will be appreciated that while the memory 214 is illustrated as a single memory, the memory 214 may comprise a plurality of memories. The plurality of memories may be embodied on a single computing device or may be distributed across a plurality of computing devices. The memory 214 may be configured to store information, data, applications, computer program code, instructions and/or the like for enabling apparatus 200 to carry out various functions in accordance with one or more example embodiments. For example, when apparatus 200 is implemented as service provider computer 106, memory 214 may be configured to store computer program code for performing corresponding functions thereof, as described herein according to example embodiments.

Still further, memory 214 may be configured to store routing tables, that facilitate determining the destination of communications received from a pharmacy computer 104, and/or adjudication computer 108. Memory 214 may further include reconciliation tables for tracking the healthcare transactions received from the pharmacy computer 104, and

reconciling them with responses received from adjudication computer **108** and/or prior authorization requests or attempts to the PBM, which may not flow through the adjudication computer **108**. The memory **214** may further comprise a database, such as cash price data source **110**, comprising cash prices of particular medications. Still further, according to certain embodiments, the memory **214** may be modified as described herein, to reformat prescription claims and/or prescription transactions with additional information received, determined and/or generated according to example embodiments.

The memory **214** may be further configured to buffer input data for processing by the processor **212**. Additionally or alternatively, the memory **214** may be configured to store instructions for execution by the processor **212**. In some embodiments, the memory **214** may include one or more databases that may store a variety of files, content, or data sets. Among the contents of the memory **214**, applications may be stored for execution by the processor **212** to carry out the functionality associated with each respective application. In some cases, the memory **214** may be in communication with one or more of the processor **212**, user interface **216**, and/or communication interface **218**, for passing information among components of apparatus **200**.

The optional user interface **216** may be in communication with the processing circuitry **210** to receive an indication of a user input at the user interface **216** and/or to provide an audible, visual, mechanical, or other output to the user. As such, the user interface **216** may include, for example, a keyboard, a mouse, a display, a touch screen display, a microphone, a speaker, and/or other input/output mechanisms. As such, in embodiments in which apparatus **200** is implemented as the pharmacy computer **104**, the user interface **216** may, in some example embodiments, provide means for user entry of insurance information, details relating to the dispensing of a prescription, and/or the like. The user interface **216** may be further configured to display or provide messages relating to prior authorization, out of pocket costs of prescription medications, and/or the like, such as when apparatus **200** is implemented as a pharmacy computer **104**. In some example embodiments, aspects of user interface **216** may be limited or the user interface **216** may not be present.

The communication interface **218** may include one or more interface mechanisms for enabling communication with other devices and/or networks. In some cases, the communication interface **218** may be any means such as a device or circuitry embodied in either hardware, or a combination of hardware and software that is configured to receive and/or transmit data from/to a network and/or any other device or module in communication with the processing circuitry **210**. By way of example, the communication interface **218** may be configured to enable communication amongst any of pharmacy computer **104**, service provider computer **106**, adjudication computer **108**, cash price data source **110** and/or apparatus **200** over a network. Accordingly, the communication interface **218** may, for example, include supporting hardware and/or software for enabling wireless and/or wireline communications via cable, digital subscriber line (DSL), universal serial bus (USB), Ethernet, or other methods.

A network, such as the network in which any of the systems of FIG. **1** or components thereof or components described herein may operate, (e.g., pharmacy computer **104**, service provider computer **106**, adjudication computer **108**, cash price data source **110**, apparatus **200**, and/or the like) may include a local area network, the Internet, any

other form of a network, or any combination thereof, including proprietary private and semi-private networks and public networks. The network may comprise a wired network and/or a wireless network (e.g., a cellular network, wireless local area network, wireless wide area network, some combination thereof, and/or the like).

Having now described an example apparatus for implementing example embodiments, FIG. **3** is a flowchart illustrating example operations of an apparatus **200**, according to some example embodiments. The operations of FIG. **3** may be performed by apparatus **200**, such as with the service provider computer **106**, and/or the like.

As shown by operation **302**, apparatus **200** may include means, such as processor **212**, memory **214**, communication interface **218**, and/or the like, for receiving an indication of a prescription transaction comprising a patient identifier identifying a patient, a prescription identifier identifying a drug, and benefit information.

The prescription transaction may be received and/or routed from any of a prescriber computer, pharmacy computer, and/or adjudication computer.

For example, the prescription transaction may be received from the pharmacy computer **104**, such as following entry by a pharmacist or other user of data relating to a prescription drug being obtained by a patient. In some examples, such as when an electronic prescription is submitted to a pharmacy computer from a healthcare provider computer, the patient may not yet be present at the pharmacy.

As another example, a prescription transaction may be submitted by a prescriber computer to an adjudication computer (e.g., via the service provider computer **106**). In certain scenarios, the prescription transaction may be submitted by a physician for the purposes of prior authorization by a PBM, and may not necessarily include pharmacy information.

In certain examples, operation **302** may include receiving the prescription transaction from the adjudication computer **108**, after it has been processed for prior authorization. Accordingly, the received prescription transaction may include a prescription transaction that was approved for benefits by a adjudication computer **108** and/or PBM.

In any event, the prescription transaction may further include or indicate benefit information such as but not limited to payer or plan identifier, group number, member identifier, and/or the like. The transaction may include or refer to, for example, one or more of the following information:

Payer ID/ Routing Information

Transaction Payer Identifier(s) that designates a destination of the healthcare transaction (e.g., BIN Number, BIN Number and PCN, or BIN Number and Group ID)

Transaction Code

Patient Information

Name (e.g. Patient Last Name, Patient First Name, etc.)

Date of Birth of Patient

Age of Patient

Patient Gender Code

Patient Address (e.g. Street Address, Zip Code, etc.)

Patient Contact Information (e.g. patient telephone number, email address, etc.)

Patient Health Condition Information

Patient Identification Identifier (such as, but not limited to, patient social security number, a subset of the patient social security number, health insurance claim number (HICN), cardholder ID, etc.)

Insurance/Coverage and/or other Benefit Information

Cardholder Name (e.g. Cardholder First Name, Cardholder Last Name)
 Cardholder ID and/or other identifier (e.g. person code)
 Group ID and/or Group Information
 Prescriber Information
 Primary Care Provider ID or other identifier (e.g. NPI code)
 Primary Care Provider Name (e.g. Last Name, First Name)
 Prescriber ID or other identifier (e.g. NPI code, DEA number)
 Prescriber Name (e.g. Last Name, First Name)
 Prescriber Contact Information (e.g. Telephone Number)
 Pharmacy or other Healthcare Provider Information (e.g. store name, chain identifier, etc.)
 Pharmacy or other Healthcare Provider ID (e.g. NPI code)
 Claim Information
 Drug, service, or product information (e.g. via National Drug Code (NDC) number)
 Prescription/Service Reference Number
 Date Prescription Written
 Quantity Dispensed
 Days' Supply
 Diagnosis/Condition
 Pricing information for the drug/service/product
 Number of Refills Authorized
 One or more Drug Utilization (DUR) Codes
 Date of Service
 Intermediary Authorization Field

The prescription transaction may be received at the service provider computer **106** for further processing as described below.

As shown by operation **304**, apparatus **200** may include means, such as processor **212**, memory **214**, communication interface **218**, and/or the like, for classifying the prescription transaction as one classification of at least two classifications. A first classification may include an indication that a prescription benefit claim associated with the prescription transaction is at least one of denied or likely to be denied. For example, a prescription benefit claim may be denied or may be determined to likely be denied due to a requirement for prior authorization. A second classification may indicate the prescription transaction is not denied, is adjudicated, is approved, is unlikely to be denied, is likely to be adjudicated, and/or is likely to be approved. In certain embodiments, an approval may refer to an approval of prior authorization, and not necessarily an adjudicated and/or paid claim.

In certain embodiments and scenarios, such as when the prescription transaction received in operation **302** was rejected due to prior authorization, the service provider computer **106** may parse the transaction to determine the rejection for prior authorization, and determine the first classification.

According to certain example embodiments, and in scenarios such as when the prescription transaction received in operation **302** has not yet been processed by an adjudication computer **108**, classification of the prescription transaction may be performed by a prior authorization engine configured to initiate a request to a payer for prior authorization, and/or to forward the prescription transaction for adjudication which in turn may invoke a prior authorization request. Additionally or alternatively, the prior authorization engine may make predictions regarding prior authorization requirements, and in certain embodiments, without forwarding the transaction to additional systems for further processing and/or adjudication.

According to certain example embodiments, classifying the prescription transaction may include transmitting a prescription claim associated with the prescription transaction, optionally formatted as a prescription claim and/or prescription benefit inquiry, to a payer computer, such as adjudication computer **108**. Example embodiments may access a routing table or other data to determine a recipient adjudication computer **108** to which to transmit a prescription claim. In this regard, example embodiments may generate the prescription claim from information provided in the prescription transaction, or forward the prescription transaction as a claim to the adjudication computer **108**. The prescription claim may be transmitted to the adjudication computer **108** in real-time or near real-time in response to receiving the prescription transaction from the pharmacy computer **104**, thereby enabling the service provider computer **106** to provide a response to the pharmacy computer **104** regarding out-of-pocket costs or patient pay amount, as described in further detail below, in real-time or near real-time.

According to example embodiments and scenarios in which a prescription claim is routed for further processing, such as to a payer computer and/or adjudication computer **108**, once received from the service provider computer **106**, the payer computer and/or adjudication computer **108** may process the prescription claim and generate a benefit response message. For example, the adjudication computer **108** may adjudicate the prescription claim, such as according to plan policies. The adjudication computer **108** may further process the claim, and if approved and/or adjudicated, may include in a benefit response message the benefit amount, co-pay, and/or remaining balance owed for the prescription identified in the prescription claim. The benefit, co-pay, or remaining balance may vary depending on whether the deductible is met, depending on agreed upon pricing for the medication under the plan, and/or the like. Other rules and/or requirements may be processed and/or validated to determine the benefit. The benefit response message may be appended to or incorporated with the prescription transaction, such that if and when received by the service provider computer **106**, the service provider computer **106** identifies the source of the response as associated with the originating prescription transaction received in operation **302**. The processed, or adjudicated prescription claim, may be transmitted back to the service provider computer **106** as an adjudicated prescription claim. However, claims subject to prior authorization, and for which prior authorization requirements are not satisfied, may be rejected as described in further detail below.

In an event, apparatus **200** may include means, such as processor **212**, memory **214**, communication interface **218**, and/or the like, for receiving a response from the adjudication computer **108**. If the response is an adjudicated prescription claim, the second classification is determined, as approved and/or adjudicated, and processing may continue at operation **310**, as described in further detail below. An adjudicated prescription claim may include an indication of approval and a co-pay amount, for example, and may not indicate any need for follow-up due to prior authorization requirements (either no prior authorization requirement exists, or the requirements are satisfied).

However, in some scenarios, submission of a response to a payer computer and/or adjudication computer **108** may result in a response that indicates a denial, reject code, rejection reason, indication of prior authorization requirement, and/or the like. In such examples, the first classifica-

tion may be determined, and processing may continue at operation 316, as described in further detail below.

It will be appreciated that according to certain embodiments, a prescription claim may not necessarily need to be transmitted to an adjudication computer to determine the first or second classification. The service provider computer 106 may alternatively utilize the prior authorization engine to assess the likelihood of adjudication, denial, and/or the like and classify the prescription transaction accordingly. For example, the service provider computer 106 may access and/or invoke a prior authorization engine to make predictions regarding prior authorization requirements, and which transactions are determined to satisfy or not satisfy any such requirements.

According to an example embodiments, the prior authorization engine may implement prior authorization requirements provided by and/or enforced by various prescription benefit plans. The prior authorization engine may then access prior prescription claims associated with the patient, and/or other data, to verify whether the prior authorization requirements defined by a benefit plan are satisfied for a transaction.

As another example, if a service provider computer 106 and/or prior authorization engine thereof does not have access to the exact prior authorization requirements may access historical records relating to prior prescription claims to predict whether a prescription claim could be rejected for a prior authorization requirement, for example. In this regard, the prior authorization engine may not necessarily be configured to implement prior authorization requirements for a prescription benefit plan, but make inferences based on prior claims rejected by a plan due to prior authorization requirements. For example, a classification may be predicted based on prior prescription claims for the same medication that has been previously rejected within the same prescription benefit plan.

In this regard, the service provider computer 106 and/or prior authorization engine thereof may predict whether a claim could be rejected for prior authorization requirements without communicating with the payer and/or adjudication computer 108. In some embodiments, the processor 212 may calculate a score, rating and/or other likelihood in determining a classification.

In any event, if the second classification is determined, indicating that a prescription claim associated with the prescription transaction is adjudicated, approved, likely to be adjudicated, and/or likely to be approved, at operation 310, apparatus 200 may include means, such as processor 212, memory 214, communication interface 218, and/or the like, for causing transmission of a prescription claim, such as to adjudication computer 108 if adjudication has not yet occurred, and/or a response to pharmacy computer 104, such as when an associated prescription claim has been adjudicated and/or to a prescriber computer 105, such as when the prescriber computer 105 submitted a request for prior authorization and/or a prescription inquiry to obtain pricing information (such as during a patient encounter). A response transmitted may include patient pay information and/or the like, and the patient may proceed to obtain their medication. In such scenarios as the second classification and/or operation 310, example embodiments may preclude and/or prevent determination of a credit amount and/or cash price alternative as discussed in further detail below as it relates to the first classification.

If the first classification is determined at operation 304, indicating denial, likely to be denied, unlikely to be adjudicated, and/or the like, various operations may be per-

formed accordingly. According to certain example embodiments, the prescription transaction may optionally be prevented from being transmitted to the adjudication computer. In such scenarios, the service provider computer 106 may return the prescription transaction and/or inquiry, optionally including a reject reason, reject code or reject message, to request further information, and/or the like.

As shown by operation 316, apparatus 200 may include means, such as processor 212, memory 214, communication interface 218, and/or the like, for determining a cash price of the drug available, such as may be available via a cash system, directly from the pharmacy, and/or the like. The cash price may therefore reflect an amount that a patient may pay for the drug without the application of a prescription benefit plan. For example, example embodiments may access or receive the cash price of the drug from a pharmacy computer 104. The drug pricing for cash transactions occurring at the pharmacy may be set, tracked and/or updated by the service provider computer 106 on an as-needed basis, and optionally maintained in a pricing database such as cash price data source 110 and/or memory 214, for example. In this regard, the service provider computer 106 may set cash prices directly based on reimbursement contracts with pharmacies, as funded by a manufacturer with an automatic adjustment of the claim, or through another vehicle like a cash discount system, (e.g., cash card) where the card sets the financial claim itself. According to example embodiments provided herein, the cash price may be automatically obtained and inserted into a prescription transaction (rather than forwarding the prescription claim to a PBM), if it is determined a prior authorization attempt was denied.

According to certain example embodiments, in instances in which cash discount systems are utilized, the service provider computer 106 may optionally store and utilize historical cash prices from prior prescription transactions that were forwarded from the pharmacy computer 104 to the service provider computer 106 for adjudication. In this regard, the service provider computer 106 may function as or comprise an adjudication switch configured for receiving prescription transactions from the pharmacy computer 104 and routing the transactions accordingly. As such, some transactions may be forwarded to an adjudication computer 108 associated with a cash discount system, and/or some transactions may be forwarded to the associated cash discount system. Transactions forwarded to a cash discount system may be stored, and a corresponding response received from the cash discount system indicating the cash prices. Example embodiments may return the cash price to the pharmacy computer 104 and/or store the cash price in a database and/or memory 214. As such, the service provider computer 106 may maintain the cash prices and utilize historical cash prices to predict or determine the cash price of a particular prescription drug. In this regard, in certain embodiments, the cash price may be appended to the prescription transaction information, such as by the pharmacy computer 104, and received by the service provider computer 106 as described with respect to operation 302.

As another example, the cash price may optionally be obtained by the service provider computer 106 by systematically accessing a website, application programming interface, or other service of a cash discount system. In certain example embodiments, the memory 214 may be configured with computer program code configured as a web bot or script to systematically access a mobile application or website of the cash discount system and obtain cash prices. For example, the cash price could be obtained in real-time or near real-time responsive to receipt of the prescription

transaction in operation 302. As another example, a web bot or script may access the website or mobile application of the cash discount system independent of a particular prescription transaction, and store the cash prices offered by particular pharmacies for certain medication in the cash price data source 110, or other memory, such as memory 214.

In any event, example embodiments may receive the cash price in real-time or near real-time responsive to the receipt of the prescription transaction, enabling a real-time or near real-time response to be provided to the pharmacy computer 104 as described in further detail below.

As used throughout, the terms real-time and near real-time indicate a seemingly instant response time at the pharmacy computer 104, such that a patient obtaining a prescription may obtain pricing information and the patient pay amount (as described in further detail below and with respect to FIG. 3), as the pharmacist or other employee interacts with a user interface of the pharmacy computer 104 or a user interface in communication with the pharmacy computer 104. As yet another example, the response may be provided to a pharmacy computer 104 and/or the like in real-time responsive to a submission of an electronic prescription being sent from a healthcare provider computer to the pharmacy computer 104, which the pharmacy computer 104 further processes as described herein. It will be appreciated that despite the reference to real-time or near real-time, certain delays based on computer processing time may be encountered.

Moreover, it will be appreciated that the cash price determined with respect to operation 316 may be referred to as a predicted cash price, or estimated cash price, due to certain embodiments utilizing historical data and/or other means to predict or estimate the cash price. As another example, the service provider computer 106 may set the cash price of a prescription drug without accessing prior claims, such as based on a ratio of a published benchmark

As shown by operation 320, apparatus 200 may include means, such as processor 212, memory 214, and/or the like, to determine a credit amount to be applied to the cash price. The credit amount may be determined in a variety of ways. For example, the credit amount may be a predetermined percentage discount, such as 25%. In some embodiments, prescription drugs may be classified into formulary tiers, and different tiers may have different associated percentages on which credit amounts are based. Based on allotments provided by manufacturers, the credit amount could be capped. As yet another example, the credit amount may be determined at least partially on what the patient pay amount for the prescription drug would be predicted to be under a benefit plan if an associated prescription claim were approved, even if it was not approved in such a circumstance such as one requiring prior authorization. The credit amount may represent an amount to be paid by, or made up by a party, such as the pharmaceutical manufacturer, or other third party provider.

According to certain example embodiments, the service provider computer 106, such as with processor 212, may be configured to generate a price sensitivity model for a particular prescription drug(s). For example, a percentage or ratio of abandonment (e.g., when the patient fails to purchase their prescription, or reverses an insurance claim to pay a cash price), for transactions reflecting a particular co-pay or patient pay amount or range thereof. Example embodiments may therefore utilize regression analysis to determine a remaining patient pay amount to use as a target, in an effort to increase and/or improve, the number of completed transactions relative to completion of prior trans-

actions. In this regard, the price sensitivity model may be utilized to determine a remaining patient pay amount, and therefore, the credit amount, and reduce the number of abandoned or reversed prescription transactions. For example, processor 212 may determine the remaining patient pay amount, and therefore, the credit amount, to attempt to reach a goal of 98% (or any other goal) completed prescription transactions, based on the price sensitivity model and regression analysis applied thereto.

A credit amount may be further determined such that the cash price available at a pharmacy, with the credit amount applied, may be lower than a cash discount price obtainable via a cash discount system.

As another example, example embodiments may determine or estimate a cash price, including in instances in which a pharmacy is not indicated in a transaction (such as when the prescriber computer 105 transmits a prescription transaction for prior authorization) based on one or more benchmarks such as but not limited to a Drug Wholesale Acquisition Cost (WAC), Average Wholesale Price (AWP), National Average Drug Acquisition Cost (NADAC), and/or the like. In this regard, the service provider computer 106 may set the cash price as a discount based on a benchmark and the pharmacy earns the same as under a contracted dispense fee.

It will be appreciated that many other rules, formulas, algorithms, and/or combinations thereof, may be contemplated for determining the credit amount and/or remaining patient pay amount.

After determining a credit amount, a remaining patient pay amount may be calculated as the cash price, estimated cash price, or cash price alternative, minus the determined credit amount. In this regard, certain example embodiments may be implemented such that the remaining patient pay amount is competitive with a patient pay amount that could otherwise be achieved with an approved and/or authorized prescription claim through a benefit plan, even though an associated prescription claim is rejected and/or likely to be rejected such as based on a preauthorization requirement.

As shown by operation 326, apparatus 200 may include means, such as processor 212, memory 214, communication interface 218, and/or the like, for reformatting the prescription transaction to a format that indicates a cash transaction and the credit amount. In this regard, the prescription transaction may be rerouted and/or redirected. The prescription claim initially intended for an adjudication computer 108 associated with a prescription benefit plan is intercepted, and optionally prevented from being transmitted to the adjudication computer 108 (or prevented from being resubmitted, if the prescription transaction was already processed by the adjudication computer 108 and rejected, for example). If however a transaction that was replace with a cash transaction according to example embodiments, was transmitted to an adjudication computer 108, such a transaction may be reversed by the service provider computer 106 transmitting a reversal.

In some embodiments the reformatted prescription transaction that indicates the cash transaction may be readable by the recipient such as a pharmacy computer and/or prescriber computer, and may further include the remaining patient pay amount, and an indication and/or message that the credit amount is applicable to a cash price and/or cash transaction, rather than a prescription claim under a prescription benefit plan. The reformatted prescription transaction may exclude the prescription benefit information included in an originally received prescription transaction, as the proposed pricing can be achieved via a cash transaction and not the prescrip-

tion benefit plan. The cash transaction is therefore not subject to the prior authorization requirements enforced by the payer and/or adjudicator, and may cause a reduction in a number of follow-up transactions and/or data communication otherwise required to satisfy prior authorization requirements.

As shown by operation 332, apparatus 200 may include means, such as processor 212, memory 214, communication interface 218, and/or the like, to transmit the reformatted prescription transaction. In certain embodiments, the reformatted prescription transaction may be transmitted to a pharmacy computer 104. The information in the reformatted prescription claim can therefore be transmitted to the pharmacy computer 104 for provision via a user interface, such that the remaining patient pay amount can be communicated to the patient. Additionally or alternatively, the reformatted prescription transaction may be transmitted to prescriber computer 105, such as in instances in which the prescriber computer 105 submitted a request for prior authorization, and/or the prescriber computer 105 attempts to obtain pricing information of the prescription drug in real-time or near real-time, such as during a patient encounter, for example.

Accordingly, even if a prescription claim is rejected, such as for a prior authorization requirement, the patient may choose to purchase the prescription with cash. In this regard, manufacturers may be more willing to offer financial assistance in scenarios in which a prescription claim was denied based on prior authorization requirements, such that patients are encouraged to adhere to the prescription and purchase the medication that may otherwise be unaffordable. Accordingly, the service provider computer 106 creates value for the manufacturer by leveraging the information indicative of a prior authorization denial, as it functions as a switch, processor, and router of prior authorization requests and related claims, and can detect prior authorization rejections prior to returning a response to a pharmacy computer 104. In this regard, example embodiments intercept such prior authorization rejections, apply an identified cash price, reformat the transaction as a cash transaction, and route the reformatted transaction to the pharmacy computer and/or prescriber computer. It will be appreciated that according to certain embodiments, and in certain scenarios, a prescription claim that would otherwise be rejected due to prior authorization requirements, may be intercepted prior to any communication with a potential recipient (such as a pharmacy computer or prescriber computer), and reformatted as the cash transaction accordingly). The reformatted prescription transaction may further include a message or associated code indicating the prescription transaction was changed to a cash transaction rather than submitted as prescription claim to the PBM.

As set forth above, example embodiments partition prescription transaction costs by determining a credit amount based on an alternative cash price of a prescription drug. In certain example embodiments, as shown in operation 334, apparatus 200 may include means, such as processor 212, memory 214, communication interface 218, and/or the like, to transmit the credit amount to a third party computer. For example, the credit amount may be transmitted to a computer associated with the pharmaceutical manufacturer, such as for record keeping, and/or the like.

Example embodiments provided herein therefore provide a technical solution to several technical problems. In the realm of denied prescription claims, such as to satisfy prior authorization requirements, rejected prescription claims are logged, tracked, and routed amongst computers and/or networks, including the pharmacy computer, prescriber com-

puter (associated with a physician and/or the like), an adjudication computer, and a service provider computer. In some cases, information must be corrected and/or appended to a prescription transaction in order for prior authorization to be granted. This may include collecting and routing information provided by physicians, prescribers, other prescription benefit plans, such as a prior prescription benefit plan of the patient, and/or the like. The tracking and routing of such transactions expends additional processing, memory, and network resources.

However, according to the technical solutions provided by example embodiments, the service provider computer 106 may determine a prescription claim is denied or likely be denied, and determine, in real-time or near real-time, a credit amount that may result in the patient purchasing the prescription at a cash price rather than facilitating the resubmission and additional processing of claims that are initially denied. The additional processing, memory, and network resources otherwise expended on the tracking, routing, and updates to such transactions may therefore be reduced according to the example embodiments provided herein.

Example embodiments are therefore integrated into a practical application of systematically partitioning prescription transactions by determining a credit amount to be applied to a prescription transaction based on an alternative cash price. Additionally, example embodiments are integrated into a practical application of improving prescription adherence by providing a real-time cash price alternative, with a credit amount applied, responsive to determining a claim is denied or likely to be denied.

It will be appreciated that the figures are each provided as examples and should not be construed to narrow the scope or spirit of the disclosure in any way. In this regard, the scope of the disclosure encompasses many potential embodiments in addition to those illustrated and described herein. Numerous other configurations may also be used to implement embodiments of the present invention.

FIG. 3 illustrates operations of a method, apparatus, and computer program product according to some example embodiments. It will be understood that each operation of the flowchart or diagrams, and combinations of operations in the flowchart or diagrams, may be implemented by various means, such as hardware and/or a computer program product comprising one or more computer-readable mediums having computer readable program instructions stored thereon. For example, one or more of the procedures described herein may be embodied by computer program instructions of a computer program product. In this regard, the computer program product(s) which embody the procedures described herein may comprise one or more memory devices of a computing device (for example, memory 214) storing instructions executable by a processor in the computing device (for example, by processor 212). In some example embodiments, the computer program instructions of the computer program product(s) which embody the procedures described above may be stored by memory devices of a plurality of computing devices. As will be appreciated, any such computer program product may be loaded onto a computer or other programmable apparatus (for example, apparatus 200) to produce a machine, such that the computer program product including the instructions which execute on the computer or other programmable apparatus creates means for implementing the functions specified in the flowchart block(s). Further, the computer program product may comprise one or more computer-readable memories on which the computer program instructions may be stored such that the one or more computer-readable memories can

direct a computer or other programmable apparatus to function in a particular manner, such that the computer program product may comprise an article of manufacture which implements the function specified in the flowchart block(s). The computer program instructions of one or more computer program products may also be loaded onto a computer or other programmable apparatus (for example, apparatus 200 and/or other apparatus) to cause a series of operations to be performed on the computer or other programmable apparatus to produce a computer-implemented process such that the instructions which execute on the computer or other programmable apparatus implement the functions specified in the flowchart block(s).

Accordingly, blocks of the flowchart support combinations of means for performing the specified functions and combinations of operations for performing the specified functions. It will also be understood that one or more blocks of the flowchart, and combinations of blocks in the flowchart, can be implemented by special purpose hardware-based computer systems which perform the specified functions, or combinations of special purpose hardware and computer instructions.

Many modifications and other embodiments of the inventions set forth herein will come to mind to one skilled in the art to which these inventions pertain having the benefit of the teachings presented in the foregoing descriptions and the associated drawings. Therefore, it is to be understood that the inventions are not to be limited to the specific embodiments disclosed and that modifications and other embodiments are intended to be included within the scope of the appended claims. Moreover, although the foregoing descriptions and the associated drawings describe example embodiments in the context of certain example combinations of elements and/or functions, it should be appreciated that different combinations of elements and/or functions may be provided by alternative embodiments without departing from the scope of the appended claims. In this regard, for example, different combinations of elements and/or functions than those explicitly described above are also contemplated as may be set forth in some of the appended claims. Although specific terms are employed herein, they are used in a generic and descriptive sense only and not for purposes of limitation.

That which is claimed:

1. An apparatus comprising at least one processor and at least one memory including computer program code, the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to at least:

receive, by a service provider computer, an indication of a prescription transaction comprising a patient identifier identifying a patient, a prescription identifier identifying a drug, and benefit information associated with a first adjudication computer to which the prescription transaction is directed;

in real-time or near real-time relative to receiving the indication of the prescription transaction:

determine, by the service provider computer, that the prescription transaction is denied based on a response from a first adjudication computer or is predicted to likely be denied by invoking a prior authorization engine configured to access stored claims previously rejected based on a requirement for prior authorization;

in response to determining the prescription transaction is denied or predicted to likely be denied, execute a

script configured to access a cash discount system to determine a cash price of the drug;

further in response to determining the prescription transaction is denied or predicted to likely be denied, determine, by the service provider computer, a credit amount to be applied to the cash price;

further in response to determining the prescription transaction is denied or predicted to likely be denied, and prior to adjudication of a claim associated with the prescription transaction, reformat the prescription transaction to a format associated with a second adjudication computer, different than the first adjudication computer, wherein the reformatted prescription transaction indicates a cash transaction and the credit amount, such that the reformatted prescription transaction is not subject to preauthorization requirements; and

redirect the prescription transaction and cause transmission of the reformatted prescription transaction including the indication of the cash transaction and the credit amount to at least one of a prescriber computer from which the prescription transaction was received, a pharmacy computer from which the prescription transaction was received, or the second adjudication computer.

2. The apparatus according to claim 1, wherein the cash price of the drug is determined based on contractual pricing associated with a manufacturer.

3. The apparatus of claim 1, wherein the at least one memory and the computer program code are configured to, with the processor, cause the apparatus to at least: transmit the credit amount to a third party computer.

4. A method comprising:

receiving an indication of a prescription transaction comprising a patient identifier identifying a patient, a prescription identifier identifying a drug, and benefit information associated with a first adjudication computer to which the prescription transaction is directed;

in real-time or near real-time relative to receiving the indication of the prescription transaction:

determining the prescription transaction is denied or predicted to likely be denied based on a requirement for prior authorization;

in response to determining the prescription transaction is denied or predicted to likely be denied based on the requirement for the prior authorization, determining a cash price of the drug;

further in response to determining the prescription transaction is denied or predicted to likely be denied based on the requirement for the prior authorization, determining a credit amount to be applied to the cash price;

reformatting the prescription transaction to a format that indicates a cash transaction and the credit amount; and

redirecting the prescription transaction and causing transmission of the reformatted prescription transaction including the indication of the cash transaction and the credit amount to a second adjudication computer, different than the first adjudication computer.

5. The method according to claim 4, wherein the first classification comprises an indication that a prescription benefit claim associated with the prescription transaction is at least one of denied or likely to be denied.

21

6. The method according to claim 4, wherein the cash price of the drug is determined based on contractual pricing associated with a manufacturer.

7. A computer program product comprising at least one non-transitory computer-readable storage medium having computer-executable program code instructions stored therein, the computer-executable program code instructions comprising program code instructions to:

receive an indication of a prescription transaction comprising a patient identifier identifying a patient, a prescription identifier identifying a drug, and benefit information associated with a first adjudication computer to which the prescription transaction is directed;

in real-time or near real-time relative to receiving the indication of the prescription transaction:

determine the prescription transaction is denied or determined to likely be denied based on a requirement for prior authorization;

in response to determining the prescription transaction is denied or predicted to likely be denied based on

22

the requirement for the prior authorization, determine a cash price of the drug;

further in response to determining the prescription transaction is denied or predicted to likely be denied based on the requirement for the prior authorization, determine a credit amount to be applied to the cash price;

reformat the prescription transaction to a format that indicates a cash transaction and the credit amount; and

redirect the prescription transaction and cause transmission of the reformatted prescription transaction including the indication of the cash transaction and the credit amount to a second adjudication computer, different than the first adjudication computer.

8. The computer program product according to claim 7, wherein the cash price of the drug is determined based on contractual pricing associated with a manufacturer.

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